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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,220	12/29/2000	Joshua Coates	SCAL.P0009	9346

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CHRISTOPHER K. GAGNE
C/O BLAKLEY, SOKOLOFF, TAYLOR & ZAFMAN LLP
12400 WILSHIRE BOULEVARD, SEVENTH FLOOR
LOS ANGELES, CA 90025

EXAMINER

ELLIS, KEVIN L

ART UNIT PAPER NUMBER

2188

DATE MAILED: 05/20/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/753,220

Applicant(s)

COATES ET AL.

Examiner

Kevin L. Ellis

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Detailed Action

1. Claims 1-12 are presented for examination.

Claim Rejections – 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1, 2, 4-7, and 9-11 are rejected under 35 U.S.C. § 102(e) as being anticipated by Paul et al., U.S. Patent 6,314,465.

- A) As to claims 1, 2, 4, 5, 7, 9, and 11, Paul et al. discloses the invention as claimed.

Paul et al. teaches a network storage system that includes storage nodes and control nodes that cache data from the storage nodes (see Fig 1). The system checks for data being requested in the caches of the control nodes and if the data isn't present the system caches the data from the storage nodes (see Abstract and Col 3 Line 44 to Col 4 Line 44).

- B) As to claims 6 and 10, the system of Paul et al. does do a form of load balancing (see Col 4 Lines 25-44).

4. Claims 1, 2, 4-7, and 9-11 are rejected under 35 U.S.C. § 102(e) as being anticipated by Lewis et al., U.S. Patent 6,553,376.

A) As to claims 1, 2, 4, 5, 7, 9, and 11, Lewis et al. discloses the invention as claimed. Lewis et al. teaches a network storage system that includes storage nodes and control nodes that cache data from the storage nodes (see Fig 1 & 5). The system checks for data being requested in the caches of the control nodes and if the data isn't present the system caches the data from the storage nodes (see Abstract and Col 3 Lines 4-8).

Claim Rejections – 35 USC § 103

5. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 8, and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul et al., U.S. Patent 6,314,465, in view of Murata, U.S. Patent 6,170,013.

A) As to claims 3, 8, and 12, Paul et al. discloses the invention substantially as claimed. However, Paul et al. does not disclose using an LRU policy for removing data from the cache. Murata teaches the use of an LRU policy for removing data from the cache (see Col 6 Line 56 to Col 7 Line 16). An LRU policy was extremely popular for caches and was well known in its use. It provides for keeping data in the cache that is accessed most recently to maintain the temporal locality principle of caches while evicting data that is

has not been used recently. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a LRU policy with the cache of Paul et al. for the reasons stated above.

7. Claims 3, 8, and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lewis et al., U.S. Patent 6,553,376, in view of Murata, U.S. Patent 6,170,013.

A) As to claims 3, 8, and 12, Paul et al. discloses the invention substantially as claimed. However, Lewis et al. does not disclose using an LRU policy for removing data from the cache. Murata teaches the use of an LRU policy for removing data from the cache (see Col 6 Line 56 to Col 7 Line 16). An LRU policy was extremely popular for caches and was well known in its use. It provides for keeping data in the cache that is accessed most recently to maintain the temporal locality principle of caches while evicting data that is has not been used recently. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a LRU policy with the cache of Lewis et al. for the reasons stated above.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin L. Ellis whose telephone number is 703-305-9659. The examiner can normally be reached on weekdays from 6:00AM-2:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 703-306-2903. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Kevin L. Ellis
Primary Examiner
April 2, 2004

Kevin L. Ellis